SENATE

REPORT 107-169

UPPER MISSISSIPPI RIVER BASIN PROTECTION ACT OF 2001

JUNE 21, 2002.—Ordered to be printed

Mr. JEFFORDS, from the Committee on Environment and Public Works, submitted the following

REPORT

[to accompany H.R. 3480]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred a bill (H.R. 3480) to promote Department of the Interior efforts to provide a scientific basis for the management of sediment and nutrient loss in the Upper Mississippi River Basin, having considered the same reports favorably thereon and recommends that the bill do pass.

GENERAL STATEMENT AND BACKGROUND

Nutrient runoff and soil erosion in the Upper Mississippi River Basin (UMRB) account for the loss of more than \$300 million in applied nitrogen and the degradation of valuable agricultural lands. Excess nutrients degrade water quality, increasing costs for treating drinking water and threatening fish and wildlife resources that support the Basin's economically significant recreation and tourism industries. The UMRB contributes 22 percent of the water flowing into the Lower Mississippi River, yet it contributes 31 percent of the nitrogen. These excess nutrients have been linked to degraded water quality and oxygen depletion in the Gulf of Mexico, resulting in what is known as Gulf hypoxia Sediment accumulates in the main shipping channel of the Mississippi River, resulting in over \$100 million each year of dredging costs. Sediment also fills wetlands and backwaters throughout the entire Mississippi River Basin, resulting in habitat decline and loss.

The need for enhanced sediment and nutrient monitoring in the UMRB is widely recognized. State and Federal agencies participating in the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force have called for "increasing the scale and frequency of monitoring of both the extent of the hypoxic zone and the sources of nutrients and conditions of waters throughout the basin." At present, there is inadequate scientific data on the amounts and sources of sediments and nutrients flowing into the UMRB. Local, State, and Federal water quality monitoring and modeling efforts are not sufficiently coordinated or standardized.

OBJECTIVES OF THE LEGISLATION

Relying on existing Federal, State and local programs, H.R. 3480 establishes a sediment and nutrient monitoring network and an integrated computer modeling program. These monitoring and modeling efforts will provide the baseline data needed to make scientifically sound and cost-effective decisions aimed at improving water quality, restoring habitat, and improving voluntary best management practices by landowners.

The U.S. Geological Survey (USGS) will be responsible for establishing the sediment and nutrient monitoring network, utilizing existing and newly established gauges and monitoring stations. USGS will develop guidelines and an electronic system for data collection and storage. Using this data, USGS will also create computer models to assess sediment and nutrient sources, mobilization, and transport. Supplementary information on land use, soil use, elevation, and nutrient reduction efforts will also be collected in a GIS format to accompany the modeling work. The findings of the monitoring network and the modeling system will be used to assist with the implementation of public and private sediment and nutrient reduction efforts.

This bill also directs the National Research Council of the National Academy of Sciences to conduct a comprehensive water resources assessment of the Upper Mississippi River Basin.

\$6.25 million is authorized to carry out this program and \$650,000 is authorized for the National Research Council assessment.

SECTION-BY-SECTION ANALYSIS

Section 1. Short Title: Table of Contents

This section cites the Act as the "Upper Mississippi River Basin Protection Act of 2001" and provides a table of contents for the bill.

Section 2. Definitions

This section defines several terms used throughout the bill.

Section 3. Reliance on Sound Science

This section states the policy of Congress that Federal investments in the Upper Mississippi River Basin must be guided by sound science. Sound Science is defined in section 2, paragraph (3).

TITLE I—SEDIMENT AND NUTRIENT MONITORING NETWORK

Section 101. Establishment of Monitoring Network

This section directs the Secretary of Interior to establish a sediment and nutrient monitoring network for the Upper Mississippi River Basin for the purposes of identifying and evaluating significant sources of sediment and nutrients in the Upper Mississippi River Basin; quantifying the processes affecting mobilization, transport, and fate of those sediments and nutrients on land and in water; quantifying the transport of those sediments and nutrients to and through the Upper Mississippi River Basin; recording changes to sediment and nutrient loss over time; providing coordinated data to be used in computer modeling of the Basin, pursuant to section 201; and identifying major sources of sediment and nutrients within the Basin for the purpose of targeting resources to reduce sediment and nutrient loss.

This section further directs the Secretary to carry out Title 1 acting through the office of the Director of the United States Geological Survey, and establishes that the sediment and nutrient monitoring network shall be headquartered at the Upper Midwest Environmental Sciences Center (UMESC) near La Crosse, Wisconsin. The UMESC includes state-of-the-art facilities, and has extensive experience in water quality analysis and data management in the region. The UMESC administers the Long Term Resource Monitoring Program (LTRMP). As the nation's largest program for river ecosystem monitoring, LTRMP includes research and monitoring activities currently being conducted on water levels and quality, sedimentation, biological indicators, and land cover/use. It also represents an information-management partnership between six States, the U.S. Army Corps of Engineers, USGS, and USFWS. H.R. 3480 would build on the existing program capacities, expanding the monitoring system beyond the main stems of the Mississippi and Illinois rivers to the broader UMR basin.

Section 102. Data Collection and Storage Responsibilities

This section provides that guidelines shall be established by the Secretary of Interior for the effective design of data collection activities regarding sediment and nutrient monitoring, for the use of suitable and consistent methods for data collection, and for consistent reporting, data storage, and archiving practices. The data that is collected shall be released to the public using generic station identifiers and hydrologic unit codes. In the case of a monitoring station located on private lands, information regarding the location of the station shall not be disseminated without the land-owner's permission.

The privacy protections included in this section are meant to enhance data collection efforts by protecting the anonymity of willing, private land-owners that participate in the data collection activities anticipated in this act. These protections are in place to ensure that monitoring data collected for the purposes of this act is not to be used by Federal agencies in the administration of their regulatory programs.

Section 103. Relationship to Existing Sediment and Nutrient Monitoring

Inventory of the sediment and nutrient monitoring efforts of Federal, State, local, and non-governmental entities, shall be conducted by the Secretary of Interior in order to create a baseline understanding of overlap, data gaps, and redundancies. Based on the inventory the Secretary shall integrate existing sediment and nutrient monitoring efforts, to the maximum extent practicable, into the sediment and nutrient monitoring network required by section 101.

The Secretary is also directed to coordinate with the Lower Estuary Assessment Group (LEAG) of Louisiana in carrying out this section. For many purposes, the entire Mississippi River Basin can be addressed as one ecosystem. However, H.R. 3480 focuses only on the Upper Mississippi River Basin.

Section 104. Collaboration with Other Public and Private Monitoring Efforts

Collaboration and coordination shall be done by the Secretary in conjunction with Federal, State, tribal, local, and private sediment and nutrient monitoring programs.

Section 105. Cost Share Requirements

The non-Federal sponsors of the monitoring network shall be responsible for at least twenty-five percent of the costs of maintaining the network. Up to 80 percent of these non-Federal costs can be provided by in-kind contributions. A monitoring effort that is being performed by a State or local entity, which is in existence upon enactment of the Act, is eligible to meet cost share requirements.

Section 106. Reporting Requirements

The Secretary must report to Congress on the development of the monitoring network within 180 days of the enactment of the Act.

Section 107. National Research Council Assessment

The National Research Council of the National Academy of Sciences shall conduct a comprehensive water resources assessment of the Upper Mississippi River Basin.

TITLE II—COMPUTER MODELING AND RESEARCH

Section 201. Computer Modeling and Research of Sediment and Nutrient Sources

This section directs the Director of the United States Geological Survey (USGS) to establish a modeling program to identify significant sources of sediment and nutrients to the Upper Mississippi River Basin. The sources shall be identified using computer modeling, which shall also be available for public and private sediment and nutrient reduction efforts.

The sediment and nutrient models for the UMRB shall include three different models. The first and second respectively, are to relate nutrient and sediment loss to landscape, land use, and land management practices. The third is to define river channel nutrient transformation processes. All ancillary information that is gathered shall be collected in a GIS format to support modeling and management use of modeling results for land use data, soils data, elevation data, information on sediment and nutrient reduction improvement actions, and remotely sense data.

The information, which is developed by computer modeling shall be headquartered at the Upper Midwest Environmental Sciences Center in La Crosse, Wisconsin.

Section 202. Use of Electronic Means To Distribute Information

Within 90 days of the enactment of the Act, the Director of the USGS shall provide information on the Internet regarding public and private programs designed to reduce sediment and nutrient loss in the UMRB, sediment and nutrient levels in the UMRB and its tributaries, and successful sediment and nutrient reduction projects.

Section 203. Reporting Requirements

One year after the enactment of the Act, the Director of the USGS shall provide to Congress and make available to public, a progress report regarding monitoring activities of the UMRB. The Director shall then every 3 years provide additional progress reports to Congress and the public, regarding modeling activities.

TITLE III—AUTHORIZATION OF APPROPRIATIONS

Section 301. Authorization of Appropriations

The Secretary is authorized \$6,250,000 each fiscal year to carry out this Act. The National Research Council shall be appropriated \$650,000 to perform the assessment required by section 107.

LEGISLATIVE HISTORY

H.R. 3480 was introduced on December 13, 2001, by Congressman Ron Kind (D-WI), and was referred to the House Committee on Resources. On December 19, 2001, it was referred within the committee to the Subcommittee on Water and Power. A subcommittee hearing was conducted on March 7, 2002. On March 20, 2002, the Committee on Resources met to consider the bill. By unanimous consent, the subcommittee was discharged from further consideration of the bill and ordered the bill favorably reported tot he House of Representatives by unanimous consent. The bill passed under suspension of the rules on April 9, 2002 and referred to the Senate Committee on Environment and Public Works.

ROLLCALL VOTES

On April 25, 2002, the Committee on Environment and Public Works met to consider H.R. 3480. The committee unanimously approved the bill by a voice vote.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee finds the bill does not create

any additional regulatory burdens, nor will it cause any adverse impact on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104-4), the committee finds that H.R. 3480 would not impose some Federal intergovernmental unfunded mandates on

State, local, or tribal governments.

H.R. 3480 contains intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA), but CBO estimates that the costs to comply with those mandates would fall below the threshold established by that act (\$50 million in 1996, adjusted annually for inflation). The bill contains no new private-sector mandates as defined in UMRA.

Cost of Legislation

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

> U.S. Congress, CONGRESSIONAL BUDGET OFFICE. Washington, DC, April 30, 2002.

Hon. James M. Jeffords, Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3480, the Upper Mississippi River Basin Protection Act of 2001.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Julie Middleton, who can be reached at 226-2860.

Sincerely.

DAN L. CRIPPEN.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

H.R. 3480, Upper Mississippi River Basin Protection Act of 2001, as ordered reported by the Senate Committee on Environment and Public Works on April 25, 2002

H.R. 3480 would establish a sediment and nutrient monitoring network as part of the Upper Mississippi River Stewardship Initiative. This new monitoring network would identify and evaluate significant sources of sediment and nutrients in the Upper Mississippi River watershed. H.R. 3480 would authorize the Secretary of the Interior, through the U.S. Geological Survey, to establish guidelines for data collection, storage, and analysis—as well as the integration of the new data into current monitoring programs and coordination with other public and private monitoring programs. In addition, the act would authorize the National Research Council of the National Academy of Sciences to conduct a comprehensive

water resources assessment of the Upper Mississippi River water-shed.

The Act would authorize the appropriation of \$6.25 million a year to implement its provisions, plus additional amounts for the required report. CBO estimates that implementing H.R. 3480 would cost \$31 million over the 2003–2007 period, assuming appropriation of the authorized amounts. CBO assumes that most of these funds would be allocated for salaries and expenses related to developing, implementing, and maintaining the new monitoring network. H.R. 3480 would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply.

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H.R. 3480 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on State, local, or tribal governments. Any costs incurred by State or local governments to participate in the program authorized by this bill would be voluntary. On April 4, 2002, CBO transmitted a cost estimate for H.R. 3480 as ordered reported by the House Committee on Resources. The two cost estimates are identical.

The CBO staff contact for this estimate is Julie Middleton. This estimate was approved by Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW

Section 12 of rule XXVI of the Standing Rules of the Senate, provides that reports to the Senate should show changes in existing law made by the bill as reported. Passage of this bill will not make changes to existing law.

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